Claim Rejections Under 35 USC §103

The 11/21/03 Office Action indicates that claims 1-54 are rejected under 35 USC §103(a) as being unpatentable over the Feierstein et al reference (US 4,162,236) et al., stating:

"Feierstein et al disclose a detergent composition comprising alkyl benzene sulfonates having 12 or more carbon atoms having a 2-phenyl content of greater than 60 % by weight of the total 2-phenyl. Furthermore, said reference teaches the use of hydrogen fluoride catalyst and vacuum pressure to facilitate the alkylation reaction (col. 2, lines 1-66). Feierstein et al teach all of the instantly required except a specific teaching in the examples of the specific 2-phenyl alkylbenzene sulfonate and other detergent ingredients. However, it would have been obvious to one of ordinary skill in the art to combine the components as described to exemplify the claimed composition because each of the components are taught and required in a single composition and the artisan of ordinary skill in the art would have been motivated to combine the component in the absence a showing to the contrary. Moreover, it is held that non-preferred embodiments can be indicative of obviousness."

Applicant's believe that the § 103 rejection in the 11/21/03 Office Action was probably actually referring to claims 1-101, and not merely to claims 1-54; this Response operates under that belief.

Applicants respectfully submit that the 11/21/03 Office Action contains an erroneous interpretation of the Feierstein et al reference on page 3, line 7 of the Office Action when it states: "...and having a 2-phenyl isomer content of greater than 60 %". The Feierstein et al reference does *not* disclose an alkyl benzene sulfonate having a 2-phenyl content of 60%. What it does disclose is an alkyl benzene sulfonate mixture in which, of all of the various isomers present, those with alkyl chains having at least 12 carbon atoms account for 60% of the total 2-phenyl content in the mixture.

Because Feierstein et al does not teach an alkyl benzene sulfonate having a 2-phenyl



isomer content of greater than 60% (upon which belief the § 103 rejections are predicated), there could not possibly be motivation for one of ordinary skill in the art to arrive at the combinations claimed in Applicants' instant specification, as asserted in the last paragraph in the section entitled "new grounds of rejection" on page 3 of the 11/21/03 Office Action, based on the teachings of Feierstein et al.

Col. 6, lines 1-18 in Feierstein et al embraces its inventive concept. In line 1, col. 6 it is stated that sample A is according to the invention, whereas samples B and C are commercial products. The total 2-phenyl content of sample A is 26.11. However, the 2-phenyl content of the C-12 fraction of sample A as separated in the gas chromatograph analytical instrument is 63.96. This is where Applicants believe the misinterpretation may have come from. *The product of the Feierstein et al reference has only 26.11 % 2-phenyl isomer content, not "greater than 60%"*.

See esp. line 17, col. 2 of Feierstein et al. The difference between Feierstein et al's product and the reference products in samples B and C is that of all the 2-phenyl present in the samples, more than 60% of Feierstein's is in C₁₂ and higher, whereas in samples B and C, there was more 2-phenyl isomer in materials having lower carbon chains appended to the ring. However, of all the materials in Feierstein et al., the one with the highest total 2-phenyl content is sample C, which only has 30.76 % 2-phenyl, which is far outside of Applicants' instant claimed range.

Thus, the prior art does not teach or even remotely suggest how to achieve Applicant's instantly-claimed subject matter, and the claim rejections under 35 USC 103(a) should be reconsidered and withdrawn. In fact, the only document of record in this case which teaches or even remotely suggests Applicants' claimed subject matter is Applicant's specification; however, it is impermissible hindsight to employ Applicants' specification against them in assembling an

obviousness rejection under 35 USC § 103! Thus, the Office is respectfully requested to reconsider the propriety of the rejections in the 11/21/03 Office Action, and to withdraw them

In view of the foregoing, Applicants respectfully request that a Notice of Allowance be issued with respect to all pending claims as soon as possible.

Thank you for your consideration.

Respectfully Submitted,

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